I am writing to express my deep concerns regarding the Broadband over Power Lines (BPL) proposal. As a ham radio operator, the prospect of additional noise generated by unshielded data transport media is frustrating and disheartening - the HF spectrum is severely noise challenged in most metropolitan and suburban areas of the country already. A greater issue, however, is forefront in my mind: Homeland Security communications.

As a member of the armed forces, I am strongly aware of the reliance place upon the HF spectrum for communications by all government agencies. The Federal Emergency Management Agency's communications structure relies heavilly upon HF for medium and long distance communications, as do the military and Department of the Interior. Our nations needs for reliable communications which are immune to sabotage is at an all-time high. HF is the primary answer to this pressing need. Repeaters and relay stations are prime targets for any sustained effort to destabilize the country, and many of these stations are remotely located and challenging to effectively secure. The HF spectrum, however, provides a medium which does not rely on such facilities, and is therefore essentially tamper-proof.

At a time such as this, when the nation's security and the well being of it's citizens is at heightened risk, is not the time to risk a compromise of our most established and essential communications resource. In it's recent rulemaking regarding Amateur access to frequencies in the 5 Mhz region, FCC exercised justified caution to ensure that government communications in the event of emergency would be well protected. Considering the current state of affairs, I agree with that wisdom, and I Urge both FCC and the broadband industry to continue the careful protection of this national resource going forward. We must protect our national resources and ensure that they are available to the government agencies that defend our communities and nation.

With this priority clearly in mind, I do not believe that now is the time to experiment with the nations HF resources for commercial gain. We already have multiple and redundant means of accessing the internet, both as businesses and consumers. There are cable modems, DSL, satellite based systems, and modems in the marketplace. More than 95 percent of the nations consumers can access the the internet using these established means, and the impact of these systems is already well characterized. Most of the issues regarding interference between these systems and established wireless communications systems used by the government, commercial, maritime, and amateur services have been, or are being resolved, but resolving those interference issues has been a time and resource intenseive process. Introducing a new source of potentially damaging interference, and one so heavilly deployed as the power grid, poses an unacceptable risk.

Once approved, BPL technology will be rapidly deployed in hundreds of cities nation wide, due to it's use of existing utility infrastructure. Every military facility, Emergency Operations Center (EOC), public service (Police/Fire/EMS) dispatch facility, school house, and amateur radio station within areas served by BPL will have this signal sent into their communications systems over

the power lines uupon which they rely.  In any area where interference becomes an issue, all of these communications facilities will be impacted, and the entire community's communications facilities will be compromised until the issues are resolved.

Additionally, damage to the power grid as a result of natural or man made disaster would nearly gurantee that BPL systems would radiate interference above normal and acceptable levels, even if the system were operating properly before the emergency situation arose.  While the behavior of BPL under ideal operating conditions has been extensively evaluated, operation under such compromised conditions has not been effectively characterized.  There are many ways for utility lines to be compromised, and all will increase the amount of interference generated by the system.  At a moment of emergency is no time to expose our communications infrastructure to  additional interference of an undetermined severity and scope.

Considering all this, I urge FCC to withold approval of BPL at this time, and to require the broadband industry to thoroughly characterize the interference generated by compromised distribution infrastructure before going forward with the approval process in the future.

Respectfully submitted,

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